# Scenarios, strategic conversations, and forecasting: A commentary on Rowland and Spaniol (2021)

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Abstract: This commentary revisits an early book review by the author of Kees van der Heijden’s influential book, ‘Scenarios: the Art of Strategic Conversation’, highlighting the continuing neglect of the role of forecasting in scenario construction. In addition, there still remains considerable ambiguity as to whether scenarios offer more than plausible stories. The review highlights the need to resolve these ambiguities in the scenario research literature through a better understanding of the links between forecasting and scenario construction. The benefit of success would be a greater understanding of long term uncertainty.

Keywords: forecasting, scenarios, uncertainty, validity

There are no conflicts of interest

No data have been used in the preparation of this article.

I have little direct knowledge of Kees van der Heijden. The various testimonials in Rowland and Spaniol’s (2021) retrospective demonstrate his substantial contribution to establishing the field of ‘foresight science’ and the ‘intuitive logics’ school, and with around 4000 citations the scholarly impact of *Scenarios* (van der Heijden, 2005)is immense. His engagement with practice, working with many colleagues, has perhaps been equally important. Despite my usual forecaster’s hat I too find myself adopting a scenario approach to long term planning questions. My contribution here arises from my 1998 review of the book’s first edition as an ‘emblematic’ academic (Fildes, 1998), apparently occupying an ivory tower. While seeing the book as ‘a thoughtful discussion’ based on the author’s considerable experience, my review was focussed on its confused attitude and misunderstanding of forecasting and in my comments here I will return to this theme.

Forecasting research in most areas has had little to say about the long term[[1]](#footnote-1). But there remain major frustrations with the research into scenarios as an alternative, which has failed to go much beyond the framework that van der Heijden laid down in 1996. Methodologically, has there been any increased clarity as to the relationship of forecasting and uncertainty to scenario building (van der Heijden, 2000)? Wright et al. (2019) offer a recent perspective but the word ‘forecast’ does not appear in their review. The link between the two is needed to answer the important question of whether any credence can be given to a particular scenario when it is used as the basis of a strategic conversation. Bluntly, if the story it tells is merely a convincing fairy tale, why should we bother to explore its ramifications. Even more dangerous, the better the story, the more we believe in it. Doesn’t spending time working through its implications run serious risks of adopting policies and making decisions that whilst congruent with that particular scenario will inevitably lead to poor outcomes?

Reviewing the last 20 years of research offers little illumination, despite the worthwhile attempt of Spaniol & Rowland (2019). Here in their synthesis of various definitions of scenarios, and following van der Heijden, they make a distinction between trend extrapolation and simulations and scenarios. This is, I think, misguided: any scenario worth its salt must include extrapolations and forecasts. These underlying forecasts will themselves have uncertainty with a predictive distribution of possible outcomes which become part of any scenario. Since there is consensus that scenarios should be consistent, plausible stories, we can see them as made up of events and trends (together with actors in the story): these events and trends taken on their own have probabilities attached to them apart from those we can label ‘black swans’. When integrated into a story, the result is inevitably a low probability scenario.

Why do we need to accept forecasting has a role in scenario construction? When we examine the criteria that define a ‘good’ scenario two elements have a direct implication for forecasting: plausibility and consistency. Some trends have an inevitability about them, ignoring them would render the scenario implausible, and some relationships likewise have shown a consistent robustness that should not be ignored (Granger & Jeon, 2007). As Derbyshire & Giovannetti (2017) point out the early work on scenarios recognized this but more recently, the intuitive logics school has focused on extremes, a point I will return to.

Two important points result from this analysis: forecasts and forecasting, however carried out, should be integrated into scenario construction rather than pilloried as ‘impoverished’ (Van der Heijden, 2005, p. 109-110). Second, any particular scenario has implications for trends and events (i.e., there is a two-way street between scenarios and forecasts so Wicke et al. (2019), examining the Syrian refugee crisis, were able to show how the production of high-quality scenarios also generated a set of forecasts). Surprisingly, their accuracy was not linked to the quality of the scenarios. However, methodologically this opens an interesting and potentially important research question of whether this counter-intuitive finding holds more widely. Its importance lies in the implication that when working with a scenario, the more specific forecasts can also be used in the planning process.

Scoblic and Tetlock (2021) take this argument in a different direction, arguing for the role of ‘superforecasters’, those individuals whose judgments are consistently better in forecasting future events. Could these individuals improve the development of scenarios? The commentators on their proposals were sceptical - whilst the expertise of the ‘superforecasters’ was real enough, it was too slight to make the difference. However, reversing their role to examine whether a scenario was consistent with developing future facts is perhaps more plausible and helpful in eliminating the implausible and the inconsistent (expanded on by Urueña , 2019).

The second important aspect of scenarios in strategic conversation is the claim that they represent ‘current understanding of the range of uncertainty’, and often, since the focus is on around 3 or 4 scenarios (Amer et al., 2013), they take on an even more ambitious role of spanning the relevant futures space (or at least from optimistic to pessimistic). It is challenging to set down a methodology for testing such a claim and there have been few if any attempts. There is again an interaction between the scenarios and the resultant forecasts that are produced within them or as a consequence of them. The results, admittedly in a controlled experimental setting, are disturbing: the presentation of the various stories (e.g., both pessimistic and optimistic, or just one of the two) affect the forecasts with various judgmental biases observed (Önkal, Sayım, & Gönül, 2013). Here the very plausibility of the scenario’s story is likely to lead to an over-confidence in its key features and these are unlikely to be grounded in any fundamental uncertainties in the decision context. There are conflicting pressures: to assign too much credibility to an unlikely event or to fix the future as only a minor extension of the current situation (Wright & Goodwin, 2009). The rigour of the process of scenario construction is unlikely to offer sufficient protection though Wright et al. (2019) have offered suggestions as to safeguards to put in place.

To summarize, the concerns I had when I first reviewed this book remain even now, as they continue to apply to the broader research literature: forecasts and their uncertainty have not been well-integrated into the research literature that has built on van der Heijden’s ideas despite some interesting attempts and even the extended discussion of uncertainty in Wright et al. (2019). van der Heijden’s book laid down many markers and has stimulated both research and practice but there remain many methodologically challenging issues of research design before we can be clear as to how best to construct and use scenarios.

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1. Of course, many pieces of research, for example on global warming, have developed models to address long term policy issues based on forecasts. However, they rarely if at all focus on predictive validation when methods applicable in the short term cannot be easily applied to longer term horizons. [↑](#footnote-ref-1)